

CLAIMS

1. A split air conditioning system consisting of an indoor evaporator unit having a water drain extending from the evaporator coil and an outdoor condenser unit including a compressor and a condenser coil, characterized in that at least a portion of the water flowing through the said water drain of the said indoor unit is lead to the condenser coil of the outdoor unit for cooling of the condenser coil.
2. A split air conditioning system according to claim 1, in which the water from the water drain is sprinkled over the condenser coil.
3. A split air conditioning system according to claim 1, in which at least one spray nozzle is provided at or near the extremity of the water drain and the water is sprayed over the condenser coil.
4. A split air conditioning system according to claim 1, in which a tray is provided at the base of the outdoor unit and water from the water drain is lead to the said tray and a pump is provided to circulate water collected in the tray to at least one spray nozzle located in proximity to the condenser coil for spraying water on the condenser coil.
5. A split air conditioning system according to claim 1, in which a tray is formed in the base of the outdoor unit and water from the water drain is lead to the said tray and a pump is provided to circulate water collected in the tray to at least one spray nozzle located in proximity to the condenser coil for spraying water on the condenser coil.

6. A split air conditioning system according to claim 1, in which the one or more spray nozzles may be at a lower, upper or intermediate position with respect to the condenser coil.
7. A split air conditioning system according to claim 1, in which at least one of the turns of the coil, typically the top most turn is sealed off and perforated and water from the water drain or the pump is lead to the sealed element for spraying water on the condenser coil.
8. A split air conditioning system according to claim 1, in which the base of the housing of the outdoor unit is formed to function as a tray for collecting water from the water drain of the indoor unit.
9. A split air conditioning system according to claim 1, in which an auxiliary water source is provided on line with the water drain arrangement in accordance with this invention.
10. A split air conditioning system according to claim 1, in which control elements such as a flow meter or a level indicator may be provided to actuate the auxiliary water source in case of deficiency of water from the water drain or in the case of evaporation losses.
11. A split air conditioning system according to claim 1, in which the condenser unit is a D shaped hollow bodied coil and a fan is located above or near the top of the coil.

12. A split air conditioning system according to claim 1, in which the condenser unit is an O shaped coil and a fan is located axially above or near the top of the coil.
13. A split air conditioning system according to claim 1, in which a tray is provided at the base of the outdoor unit and water from the water drain is lead to the said tray and a pump is provided to circulate water collected in the tray to at least one spray nozzle located in proximity to the condenser coil for spraying water on the condenser coil and one or more turns of the condenser coil dip into the water collected in the tray.